

Investor site visit

UK Couplings, Cardiff

27th April 2017



- Robert Purcell Chief Executive
- Ian Scapens Group Finance Director
- Matt Taylor Global Managing Director – Chain
- Andy Harbidge Managing Director – Couplings
- Paul Richards Engineering Director

Key highlights from the Trading Update issued on 11 April 2017:

- “....underlying revenue is expected to be broadly flat.”
- “Underlying revenue growth of approximately 3.1% for the second half of the year is a significant improvement over the 4.0% decline reported for the first half.”
- “Net debt finished the year at £17.4m”
- “We...expect to report results for the full year in line with market expectations.”
- “The order book at 31 March was 9.0% higher than at the prior year end...”

UK Couplings

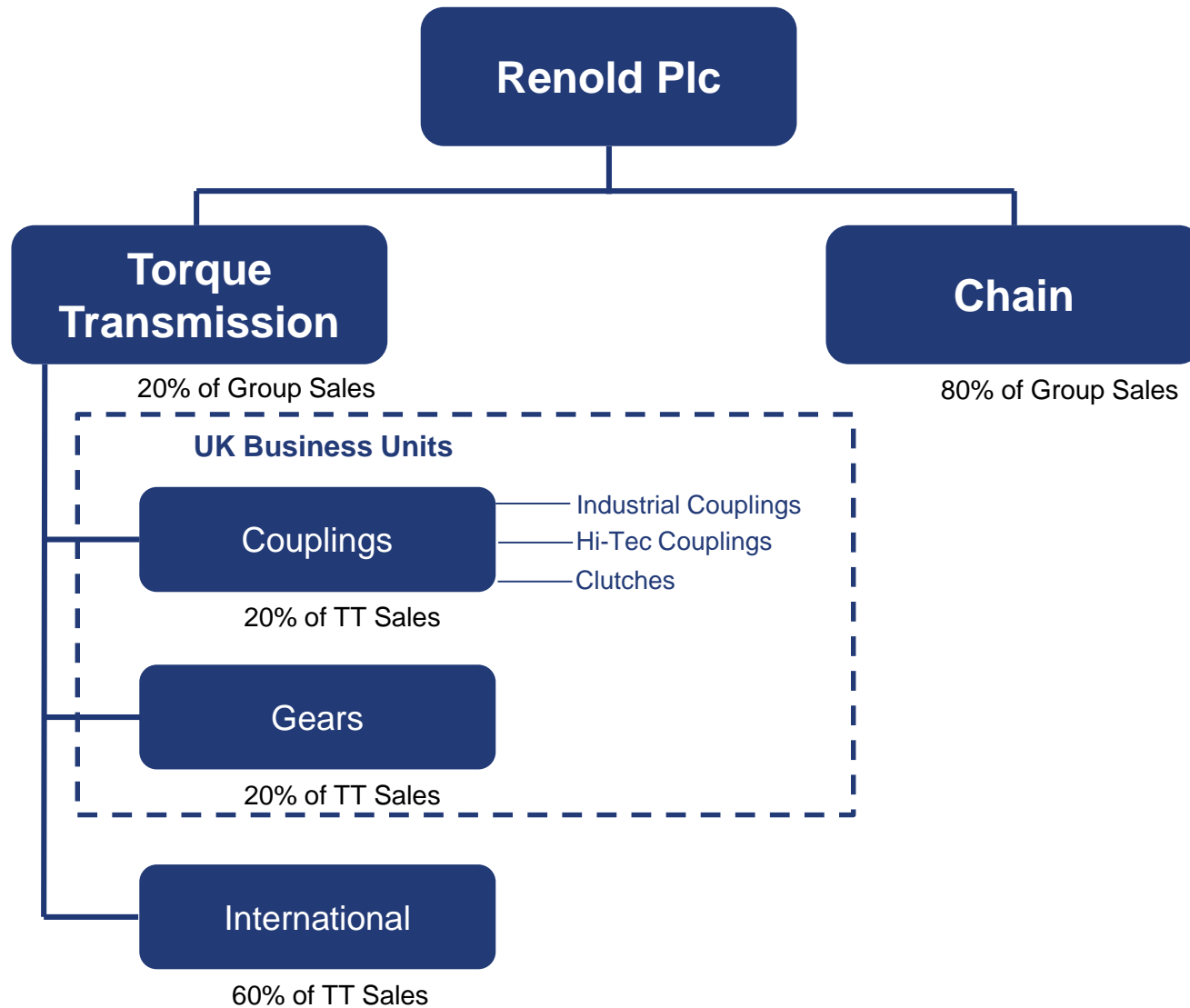


Andy Harbidge
Paul Richards

Managing Director - Couplings
Engineering Director

27th April 2017





Note:- Sales % based on external sales

1852

Hans Renold born on July 31st in Aarau, a small town in Switzerland

1914

Hans Renold Ltd. design and patent their flexible chain coupling. A product that is still used worldwide today

1964

Renold Group acquire John Holroyd and Co Ltd

1996

Renold acquire the Holset couplings business in Halifax and renames the company Renold Hi-Tec Couplings.



Cardiff factory moved to a new premises on Newlands Road

2017

Manufacturing of the Renold Hi-Tec coupling range relocates to Cardiff factory

1900

Hans Renold Co. design and manufactures a Coning Machine

1943

On May 2nd after a period of failing health Hans Renold passed away at the age of 90

1972

Renold Ltd. Acquire Ajax, USA

2015

Step2020 strategic plan announced. Renold employs around 2,200 people in almost 20 countries around the world

1903

Hans Renold Ltd. formed



Factory Acquired at Cardiff by Renold and Coventry Chain Co. Ltd

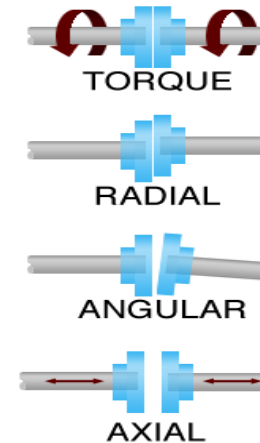
1947

The manufacture of Couplings begins at Cardiff



Coupling Functionality

- Mechanical device for connecting two rotating shafts
- Transmits torque from one shaft to another
- Allows for different types of misalignment
- Creates flexibility and can reduce shock loads



Classifications of Couplings



Torsionally Flexible

Spiderflex/Jaw/Wrap
Pinflex
Crownpin
Tyreflex
Disclex



Torsionally Rigid

Gearflex
Chainflex



Torsionally Rigid Zero backlash

Renoldflex
Rigid



Vibration Absorbing

Hydrostart
Hi-Tec HTB
Hi-Tec DCB
Hi-Tec RB / RBI
Hi-Tec VF

Industrial Couplings

Product Range

- Gear couplings
- Fluid couplings
- Pin & buffer couplings
- Spider couplings
- Tyre couplings
- Disc couplings

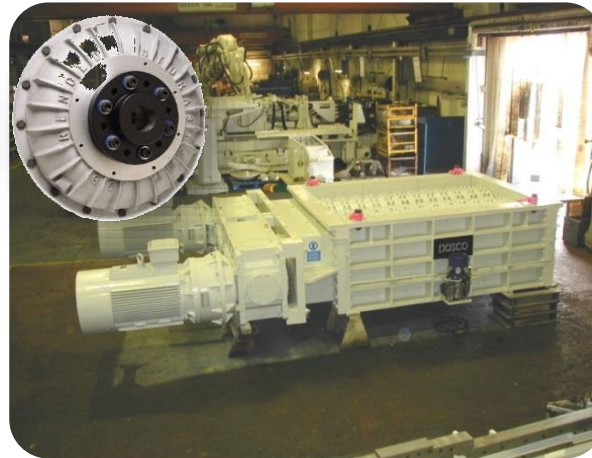
Competitive Differentiators

- Industry leading range
- On-site engineering support
- Bespoke product design
- UK manufacture
- Standard product range stock
- Brand & reputation



Industrial Couplings – Applications

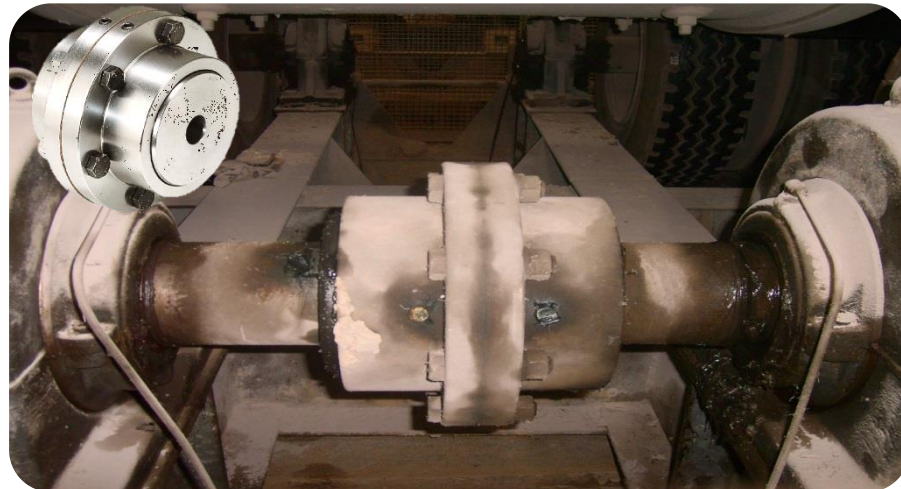
- Quarrying & mining
- Cement production
- Steel production
- Material handling
- Water industry
- Pulp & paper
- Energy production
- Food & drink manufacturing
- Mixers/crushers
- Escalators
- Plus many more



Hydrastart in a Crusher Application



Pinflex in a Conveyor Application



Gearflex in a Rotary Screen

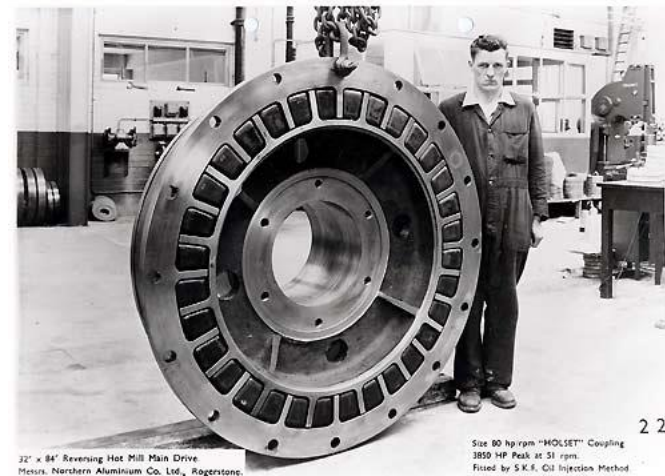
Hi-Tec Couplings

Product Range

- HTB Range (High Temp Blind Assembly)
- RB Range (General Purpose)
- DCB-GS Range (Diesel / Gas Engines/ Compressors)
- PM Range (Heavy Industry – severe shock & vibration)
- MSC Range (Diesel Drive & Compressors)
- Spares

Competitive Differentiators

- Rubber in compression
 - Reduced vibration / vibration tuning
 - Failsafe mechanism
 - Maintenance free
- Industry leading range
- On-site engineering support
- Bespoke product design
- UK manufacture
- Brand & reputation



22" x 84" Reversing Hot Mill Main Drive
Metals: Northern Aluminium Co. Ltd., Rotherstone.

Size 80 hp/rpm "HOLSET" Coupling
3850 HP Peak at 51 rpm
Fixed by S.K.F. Oil Injection Method

Hi-Tec Couplings - Applications

- Steel production
- Mining & quarrying
- Power generation
- Cement production
- Marine propulsion
- Rail traction
- Pumps
- Compressors



PM application – Grinding Mill



VF application – Luxury Yacht



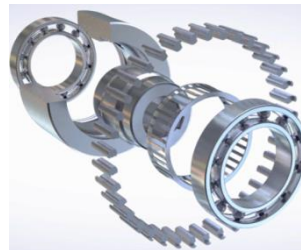
DCB application – Military Vessel, Main propulsion & generator

Clutches (Freewheels & Backstops)

- One way drive mechanisms (like on a bicycle) used as a backstop or overrun in many industries.

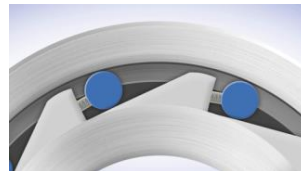
Type A – Spragg Freewheels

- High torque transmission
- Over-running
- Typical applications:-
Conveyors, feeders, large conveyors, pumps, engines & motors, theme park rides



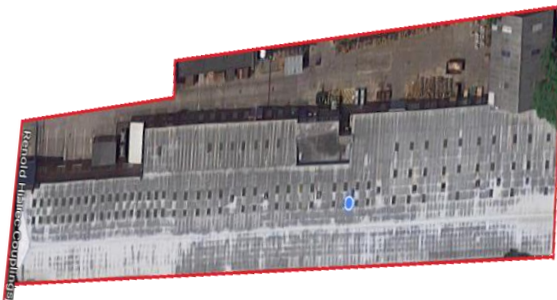
Type B – Trapped Roller

- Smaller torque transmission
- Over-running
- Typical applications:-
Fan drivers, blowers, small pumps, starter drives, small engines



Halifax Location

- Hi-Tec product range production
- 2,300m²
- 4,700m² (1.2 acre) site
- Land locked no room for expansion
- Key equipment
 - Ranges from 9-20 years old
 - Average age of 16 years
- Headcount 41



Cardiff Location

- Industrial couplings & clutch range production
- 4,200m²
- 14,500m² (3.6 acre) site
- Site with space and room for expansion
- Key equipment
 - Ranges from 15-40 years old
 - Average age of 24 years
- Headcount 62



Pre and post project

Sq Ft

Halifax	Cardiff	Combined	Post
35,663	45,000	80,663	45,000

Headcount

Halifax	Cardiff	Combined	Post
41	62	103	85

Average Age of
key equipment

Halifax	Cardiff	Combined	Post
16	24	21	13

Average time
saved

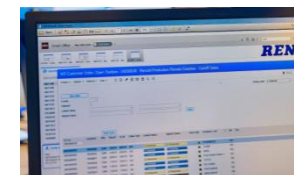
Hi Tech Product	Industrial Product
40%	52%
Excluding transportation	

Capital
Investments

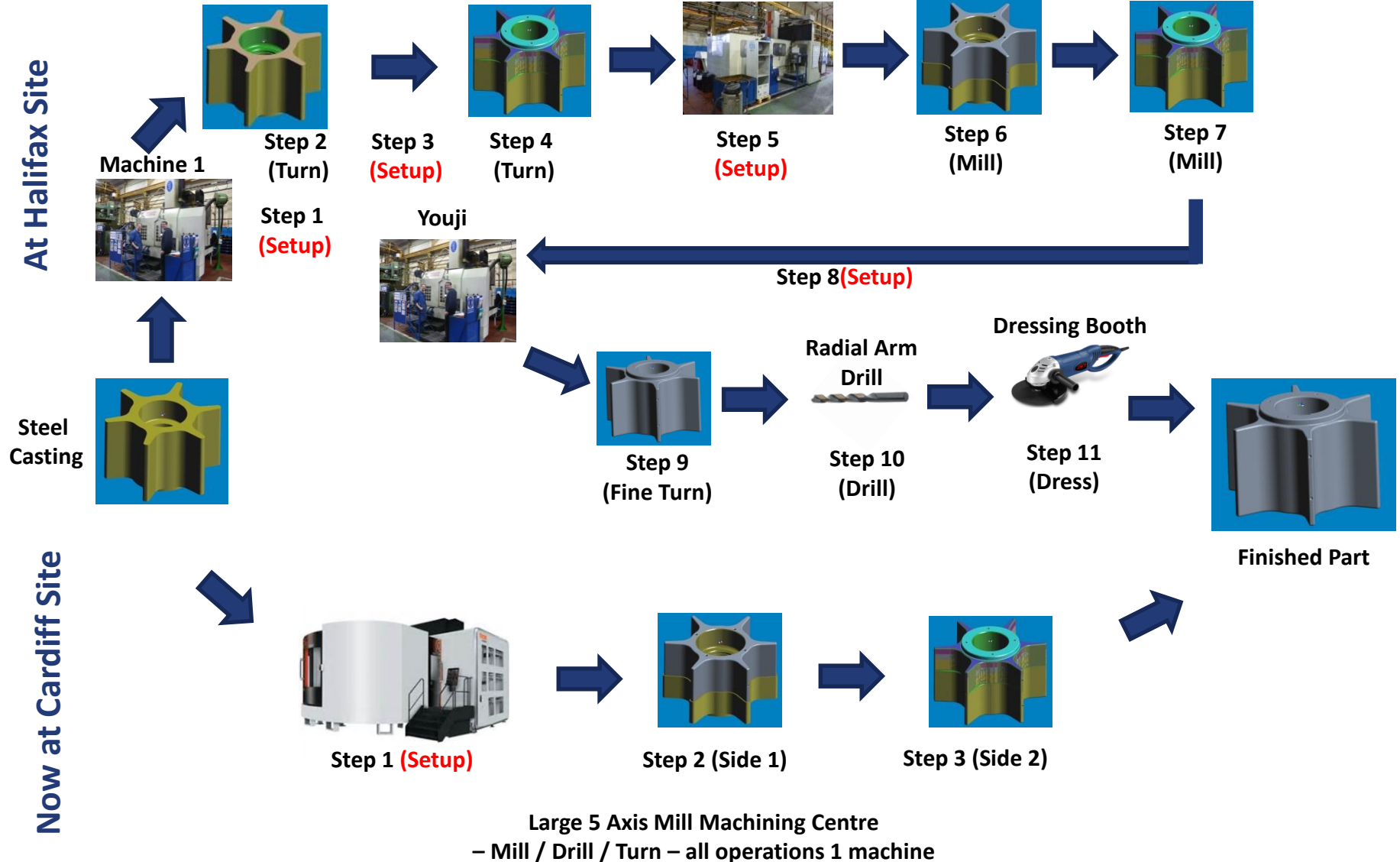
- Cardiff Factory Preparation (new concrete slab, warehouse changes, etc.)
- 3 x Medium Sized Machining Centres
- 1 x Large Sized Machining Centre
- Additional Cranes

Other Key
Actions

- INFOR M3 ERP System implemented at both sites prior to project and combined during project
- 23 new people hired in Cardiff
- 1700 man hours of cross training on transferred machines



Manufacture Process – Before & After



Key Next Steps

- Finalise Project Cyclone & realise project goals
- Expand Hi-Tec product range to suit higher volume applications
- Maximise returns from recent investment and continue to utilise new production technology to improve cost and service
- Commercial focus through targeting key markets and customers



Renold Chain

Investor Day Presentation



Matt Taylor Global Managing Director - Chain

27th April 2017

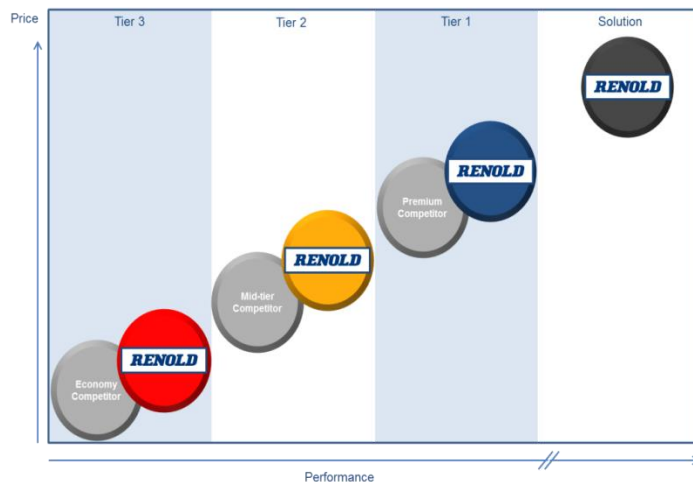


Renold Chain

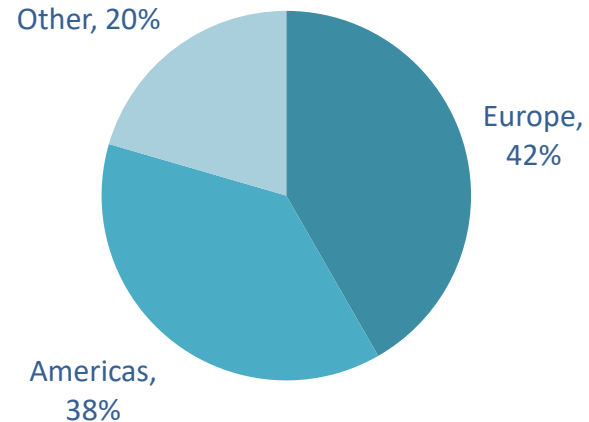
- Global market for “industrial” chain in excess of £1.5bn
- Sales in more than 100 countries worldwide
- Global manufacturing capability
- Well represented in developed economies
- Increasing presence in emerging nations – major growth opportunity
- 1700 staff worldwide
- Renold number two player globally by revenue

Renold Positioning

- High performance chain solutions positioned at the premium end of each market segment



Revenue By Region



Renold Differentiation

- Renold chain is an engineered product with performance characteristics suited to specific applications :
 - Wear
 - Tensile Strength
 - Fatigue Performance
 - Corrosion Resistance
 - Low Maintenance
 - Abrasion Resistance
 - Chain Efficiency
- Renold chain is engineered and manufactured in our own factories to levels above global norms and standards

Roller (Transmission) Chain

- Strong brand recognition and technical differentiation
- Solution chains - low maintenance, abrasion resistant, anti corrosion
- Mainly used in power transmission applications
- Key Markets : Construction, Packaging, Food Processing, Machine Building, Printing, Timber, Steel, Confectionary, Automotive Assembly



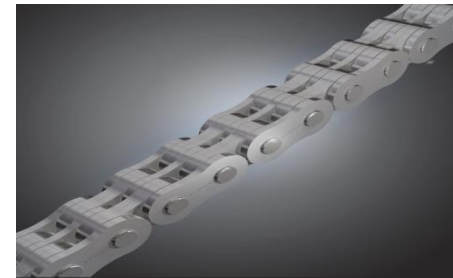
Conveyor (Engineering) Chain

- Engineering solutions for the movement of raw materials, products, and people
- Typically heavier duty than roller chain
- Key Markets : Agriculture, Leisure, Mining, Cement, Escalator, Mining, Timber, Steel, Bakery, Construction, Food Processing, Theme Park



Leaf Chain

- Mainly used in lifting applications with tensile strength and fatigue performance key
- Key Markets : Fork Lift trucks, Telehandlers, Container Handling, Energy, Oil and Gas, Automated Parking Systems



Tooth Chain

- Niche chain product with strong technical differentiation
- Application specific : High power to weight ration, high speeds
- Used for both power transmission and conveying
- Key Markets : Glass bottle production, Automotive Assembly, Solar Panels, Machine Building

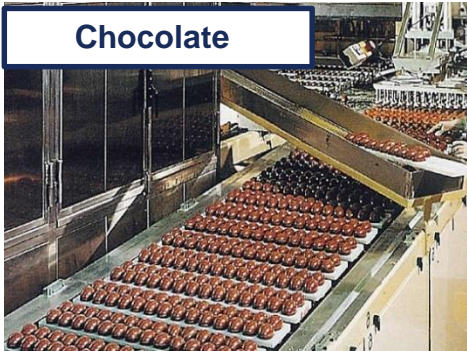


Myriad of different applications across a wide spread of industries.....

Theme Park



Chocolate



Fork Lift Truck



Timber



Logistics



Cement



Recycling



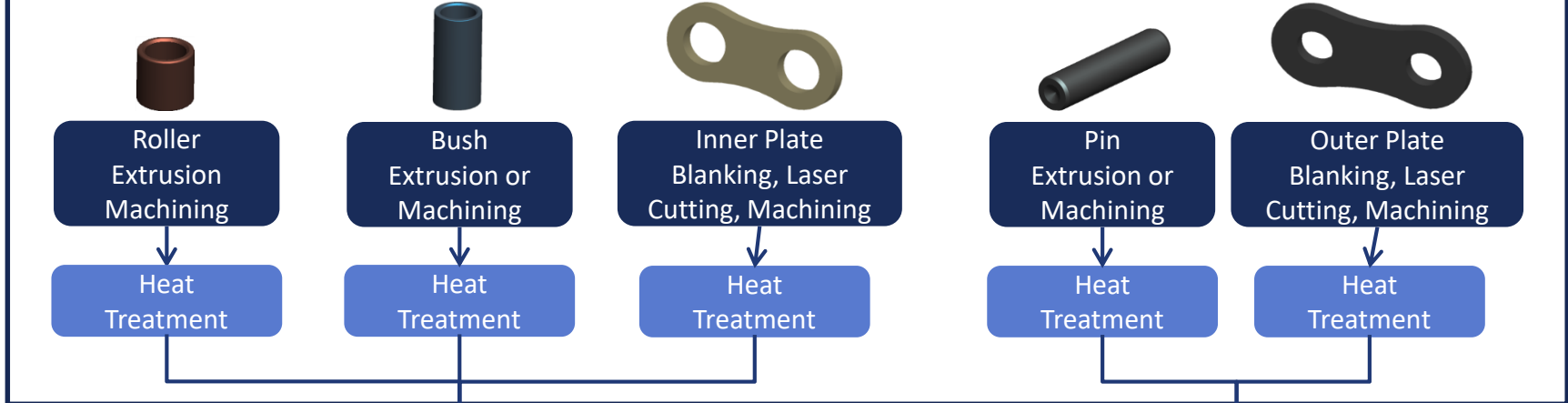
Beverage



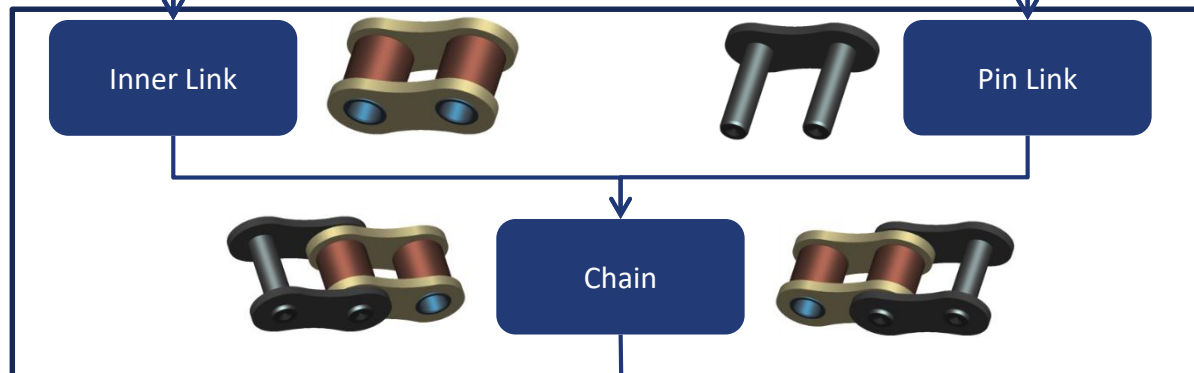
Manufacturing footprint designed to enable local service and rapid response while gaining scale benefits



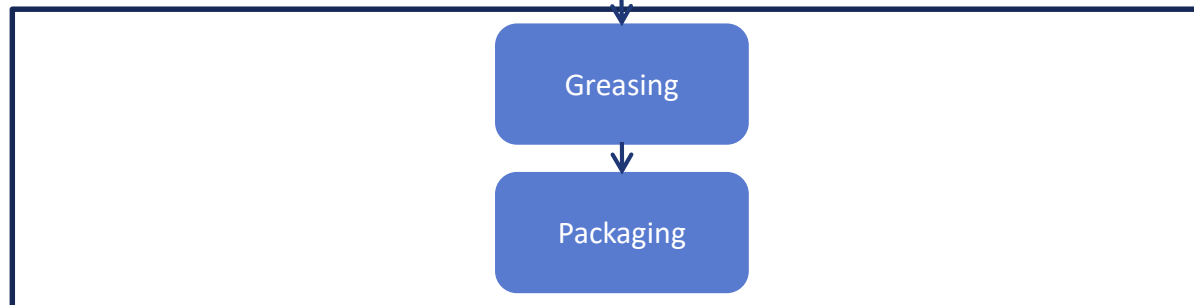
Component Manufacture



Assembly



Finishing



Phase I - Restructure



Phase I – Investment and Efficiency

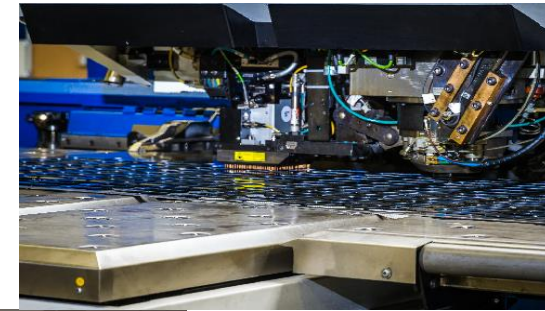
Key Challenges

- Historic under investment in machinery has resulted in:
 - Production bottlenecks
 - Labour intensive processes
 - Lack of flexibility
 - Inability to scale production when required
 - Poor process stability

Investment Strategy

- Machinery Upgrades
 - Increased overall output capability
 - Improved responsiveness
- Automation and robotics
 - Faster production
 - Reduced labour
 - Improved process capability
- New technology
 - Process elimination
 - Greater flexibility

Laser Cutting



Sinico M/C Centre



Robotic Assy Cells



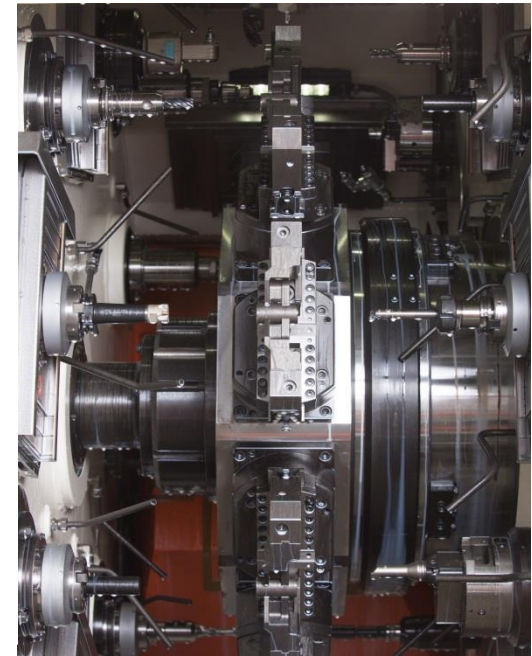
High Speed Press



Phase I – Investment and Efficiency

Case Study – Rotary Transfer Machine

- Game changing technology, replacing 18 pieces of equipment with one machine
- Removal of approximately 60% of manufacturing operations for round parts (over 30% of total operations)
- Reduced plant complexity and improved service levels – finished components, right first time
- Reduced inventory
- Improved competitiveness

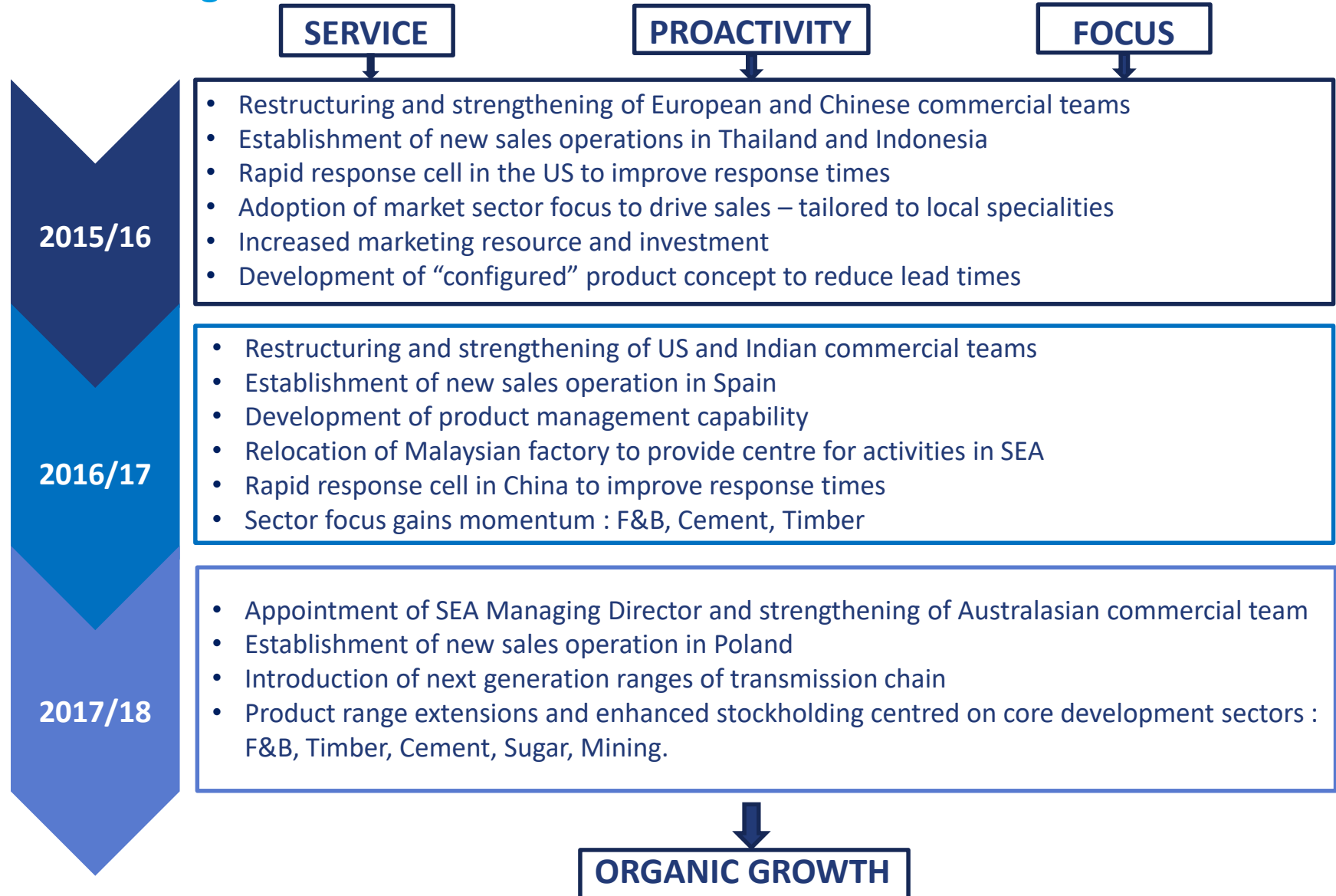


Example : Complex Pin

Manufacturing Operations	From 3 to 1
Time savings / piece	285 seconds
Annual hours saved	950 hours



Phase II – Organic Growth



Phase III – Acquisition Renold Tooth Chain

Background

- Renold Tooth Chain acquired from Aventics in January 2016
- Production and sales of tooth chain based in Gronau, Germany (30kms from Einbeck)
- Market leading products with rolling pivot joint and laser welded plates
- Turnover circa €9m, 1000 live customers, 65 employees
- Particularly strong in glass bottle production and automotive production lines
- Excellent fit with Renold displaying many positive acquisition characteristics

Progress

- Acquisition successfully completed within planned timeframes, including employee transfer, carve out of IT systems and transition services agreement
- Business fully rebranded as Renold Tooth Chain in first three months
- Customers transitioned with no business loss
- Renold IT platform implemented December 2017
- Tooth chain now sold by the global chain commercial teams
- Solid trading with orders and sales growth



Phase III – Acquisitions

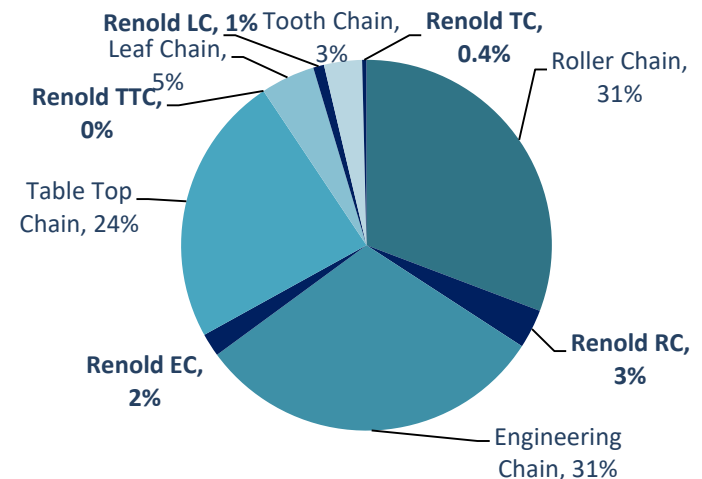
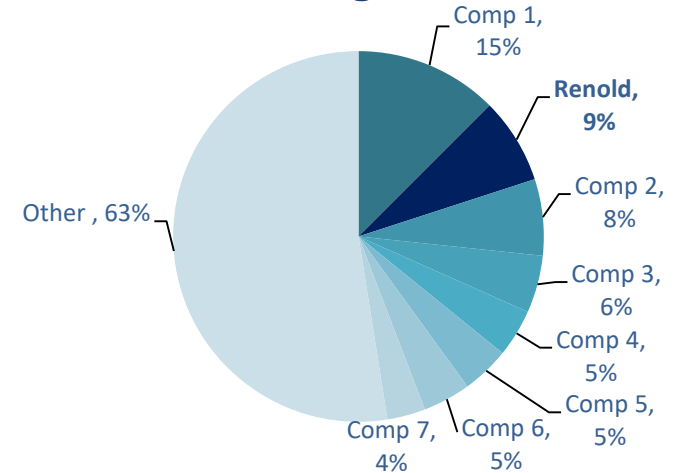
The Opportunity

- The global market for chain remains highly fragmented
 - > 150 manufacturers globally
 - Few players have true global capabilities
- Many western suppliers have outsourced manufacturing of certain products to Asia – with associated quality and supply chain issues
- Interesting market niches like tooth chain (est. £50m+) and flat top (est. £500m+)

Renold Acquisition Criteria

- Complementary product ranges and/or technology
- Opportunities to leverage through our global sales and distribution footprint
- Cross selling through existing customer bases
- Cost reduction through consolidation – manufacturing and indirect costs
- Insourcing of products currently sourced externally / from competitors, particularly in low cost countries
- Geographic expansion (e.g. South America)

Market Fragmentation



- Phase 1 - Restructuring well advanced
- Investments in new machinery now delivering operational benefits
- Organic growth actions starting to gain traction
- 1st acquisition successfully completed; further opportunities exist
- Plenty remains to be done but many reasons for optimism



- Delivering on all phases of the STEP 2020 Strategic Plan in the Chain division
- Torque Transmission change programme started later
 - Consolidation of UK Couplings facilities well advanced
- Further work to do in both divisions to improve operational efficiency and service....but much has been done
- “....market conditions remain volatile....”
 - “European markets are improving, but trading conditions in North America remain challenging”
- “....we continue to pursue our strategy....we look forward more confidently to the future.”

